



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,637	03/18/2004	Hiroto Okawara	CANO:132	5358
37013 7590 04/16/2008 ROSSI, KIMMS & McDOWELL LLP. P.O. BOX 826 ASHBURN, VA 20146-0826				
EXAMINER				
KHAN, USMAN A				
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
04/16/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/803,637

Applicant(s)

OKAWARA, HIROTO

Examiner

USMAN KHAN

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 March 2004 and 15 October 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/30/2008 has been entered.

Response to Arguments

Applicant's arguments filed on 03/30/2008 with respect to claims 1 - 3 and 6 - 12 have been considered but are moot in view of the new ground(s) of rejection. Also, newly added claim 12 is rejected as discussed below.

Regarding objection to claim **11** provided in the previous office action. Applicant has amended claim **11** to overcome the objections to these claims.

In response to applicant's argument for claims 1, 10, and 11:

Regarding **claim 1, 10, and 11**, Applicant argues that the claim distinguish over prior art of record because prior art of record does not disclose varying the focusing sensitivity based on the depth of field.

In response to applicant's argument:

This limitation is not claimed in claims 1, 10, and 11 i.e. there is no focusing sensitivity based on the depth of field claimed as argued by the applicant. The claim

only calls for general moment amount of a lens according to a movement of a manual focus.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 8, 10, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirasawa (US patent No. 5,315,340).

Regarding **claim 1**, Hirasawa teaches an image pickup apparatus (column 7 lines 26 – 36, column 8 lines 15 – 46, and column 10 lines 57 et seq. camera), comprising:

a focus lens (figures 1 and 4 item 105); an operating member adapted to change its operation amount by a manual focus control (figure 6 item 301); a detection device adapted to detect the operation amount of said operating member (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21); and a control unit adapted to control the movement amount of said focus lens corresponding to the detected operation amount (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21), wherein said unit is adapted to render the moving amount of said focus lens corresponding to the detected

operation amount when the present state of said focus lens is in a first depth of focus greater than when the present state of said focus lens is in a second depth of focus, the first depth of focus being deeper than the second depth of focus (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21).

Regarding **claim 6**, as mentioned above in the discussion of claim 1 Hirasawa teach all of the limitations of the parent claim. Additionally, Hirasawa teaches said detection device comprises a photoelectric conversion type sensor (column 6 lines 42 – 68 and column 7 lines 4 – 43).

Regarding **claim 8**, as mentioned above in the discussion of claim 1 Hirasawa teach all of the limitations of the parent claim. Additionally, Hirasawa teaches said operating member is a rotatable ring member which is disposed in concentricity with an optical axis of said focus lens, and is mechanically disconnected from the focus lens (figure 6 and column 6 lines 42 – 54).

Regarding **claim 12**, as mentioned above in the discussion of claim 1 Hirasawa teach all of the limitations of the parent claim. Additionally, Hirasawa teaches a zoom lens adapted to adjust an amount of light passing there through by changing its position (figures 1 and 4 item 102) and an aperture adapted to adjust a brightness for said focus lens by changing its position (figures 1 and 4 item 103), wherein the first depth of focus and the second depth of focus are determined based on at least one of the position of

said zoom lens or the position of said aperture (figures 1 and 4 items 102, 103, 116b – 116d and column 4 line 56 – column 5 line 21).

Regarding **claim 10**, Hirasawa teaches a control method for an image pickup apparatus (column 7 lines 26 – 36, column 8 lines 15 – 46, and column 10 lines 57 et seq. camera) including at least a focus lens (figures 1 and 4 item 105), an operating member adapted to change its operation amount by a manual focus control (figure 6 item 301), and a detection device adapted to detect the operation amount of the operating member (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21), the control method comprising:

a controlling step of controlling the movement amount of said focus lens corresponding to the detected operation amount (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21), wherein said controlling step comprises the step of rendering the moving amount of the focus lens corresponding to the detected operation amount when the present state of the focus lens is in a first depth of focus greater than when the present state of the focus lens is in a second depth of focus, the first depth of focus being deeper than the second depth of focus (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirasawa (US patent No. 5,315,340) in view of Norita et al. (US patent No 6,906,751).

Regarding **claim 2**, as mentioned above in the discussion of claim 1 Hirasawa teaches all of the limitations of the parent claim. Additionally, Hirasawa teaches that wherein control unit controls the moving amount of said focus lens corresponding to the detected operation amount (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21).

However, Hirasawa fails to disclose a recording device adapted to record a picked-up image picked up via said focus lens onto a recording medium. Also, the control unit controls the moving amount of the focus lens in accordance with the depth of focus that has been corrected based on a pixel density of the picked-up image and a pixel density of a recorded image to be recorded onto the recording medium. Norita et al., on the other hand teaches a recording device adapted to record a picked-up image picked up via said focus lens onto a recording medium. Also, the control unit controls the moving amount of the focus lens in accordance with the depth of focus that has

been corrected based on a pixel density of the picked-up image and a pixel density of a recorded image to be recorded onto the recording medium.

More specifically, Norita et al. discloses a recording device adapted to record a picked-up image picked up via said focus lens onto a recording medium (figure 3 item 7 figures 11 and 13 item 70 and column 2 lines 30 – 34, column 3 lines 8 – 22, and column 6 lines 19 *et seq.*). Also, the control unit controls the moving amount of the focus lens in accordance with the depth of focus that has been corrected based on a pixel density of the picked-up image and a pixel density of a recorded image to be recorded onto the recording medium (figures 24 – 26; column 3 lines 8 *et seq.* and displaying and recording in accordance with a focus).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Norita et al. with the teachings of Hirasawa because in column 2 lines 10 – 16 Norita et al. teaches that the camera has a function of making a judgment of whether the memory has enough free space for a new image signal to be stored; and a memory controller for erasing the oldest one of already-stored image signals from the memory if the memory has not enough space, and storing the new image signal there by there is always space for new images to be stored. Also, Norita et al. teaches in column 3 line 65 – column 4 line 2 that the camera has a function to shorten the time involved in the preliminary imaging to thereby reduce time required before the actual imaging.

Regarding **claim 11**, Hirasawa teaches an image pickup apparatus (column 7 lines 26 – 36, column 8 lines 15 – 46, and column 10 lines 57 et seq. camera) including at least a focus lens (figures 1 and 4 item 105), an operating member adapted to change its operation amount by a manual focus control (figure 6 item 301), and a detection device adapted to detect the operating amount of the operating member (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21), the control method comprising:

controlling step of controlling the movement amount of said focus lens corresponding to the detected operation amount (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21), wherein said controlling step comprises the step of rendering the moving amount of the focus lens corresponding to the detected operation amount when the present state of the focus lens is in a first depth of focus greater than when the present state of the focus lens is in a second depth of focus, the first depth of focus being deeper than the second depth of focus (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21).

However, Hirasawa fails to disclose a storage medium storing a computer program for causing a computer to execute a control method for the image pickup apparatus. Norita et al., on the other hand teaches a storage medium storing a computer program for causing a computer to execute a control method for the image pickup apparatus.

More specifically, Norita et al. discloses a storage medium storing a computer program for causing a computer to execute a control method for the image pickup apparatus (column 5 line 62 – column 6 line 4 and column 21 lines 6 - 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Norita et al. with the teachings of Hirasawa because in column 2 lines 10 – 16 Norita et al. teaches that the camera has a function of making a judgment of whether the memory has enough free space for a new image signal to be stored; and a memory controller for erasing the oldest one of already-stored image signals from the memory if the memory has not enough space, and storing the new image signal there by there is always space for new images to be stored. Also, Norita et al. teaches in column 3 line 65 – column 4 line 2 that the camera has a function to shorten the time involved in the preliminary imaging to thereby reduce time required before the actual imaging.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirasawa (US patent No. 5,315,340).

Regarding **claim 3**, as mentioned above in the discussion of claim 1 Hirasawa teach all of the limitations of the parent claim.

Additionally, Hirasawa teaches that wherein said control unit controls the moving amount of said focus lens corresponding to the detected operation amount (figure 4 item 116b – 116d and column 4 line 56 – column 5 line 21).

However, Hirasawa fails to teach that the control unit controls the moving amount of the focus lens in accordance with exposure time.

The examiner takes Official Notice that it is old and well known in the art to have a focus operation in accordance with an exposure time which is controlled by a control device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a focus operation in accordance with an exposure time to correct for brightness problems in images to be focused which have long exposure times thus compensating for the shake of the camera and other happenings during the exposure time.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirasawa (US patent No. 5,315,340) in view of Okawara (US PgPub 20020041334).

Regarding **claim 7**, as mentioned above in the discussion of claim 1 Hirasawa teaches all of the limitations of the parent claim.

However, Hirasawa fails to disclose that the detection device comprises a magnetic type sensor. Okawara, on the other hand discloses that the detection device comprises a magnetic type sensor.

More specifically, Okawara discloses that the detection device comprises a magnetic type sensor (figures 12 and 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Okawara with the teachings

of Hirasawa because in paragraph 0058 Okawara teaches that the invention improves operation performance and feeling of a control system without mechanical coupling between the operation member and lens, by optimizing the relationship between the operation of an operation member and a lens drive/stop operation.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirasawa (US patent No. 5,315,340) in view of Applicants admitted prior art.

Regarding **claim 9**, as mentioned above in the discussion of claim 1 Hirasawa teaches all of the limitations of the parent claim.

However, Hirasawa fails to disclose that the focus lens comprises an inner focus type lens unit. Applicants admitted prior art, on the other hand discloses that the focus lens comprises an inner focus type lens unit.

More specifically, Applicants admitted prior art discloses that the focus lens comprises an inner focus type lens unit (page 1 lines 18 - 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Applicants admitted prior art with the teachings of Hirasawa because in page 1 lines 18 - 22 Applicants admitted prior art teaches that the use of a inner focus type lens units can realize cost reductions, system simplifications, and reductions in the size and weight of a lens barrel.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Usman Khan/
Usman Khan
04/10/2008
Patent Examiner
Art Unit 2622

/Tuan V Ho/
Primary Examiner, Art Unit 2622